



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

PRELIMINARY ISSUE

650.7610

Job Sheet 211622



Part No: 650.7610

Job Qty: 3 pcs

Part Name: Trigger



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/22/20

Job Tracking No:

Created By: Jennifer Renwick

Due Date: 7/24/20

Type: SOLD

Description:

Note: DWG 650.7600 REV.PA1 IPP REV.A NEW ISSUE JFS 20/07/03 VERIFIED BY:DD

Ship Via:

139 Valve

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		DAS	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time		
100	HAAS 5 Axis	3 pcs	7/24/20	7/24/20	0.75	2.25	HAAS - 1 - 5		33	20/08/20
							HAAS - 2 - 5		9-89	
110	QC 2	3 pcs	7/24/20	7/24/20	0.00	0.00	QC 2 - 1			
							QC 2 - 12			
							QC 2 - 14			
							QC 2 - 17			
							QC 2 - 19			
							QC 2 - 2			
							QC 2 - 20			
							QC 2 - 22			
							QC 2 - 23			
							QC 2 - 25			
							QC 2 - 32		DAS	
							QC 2 - 33		33	20/08/20
							QC 2 - 35		9-89	
							QC 2 - 39			
							QC 2 - 4			
							QC 2 - 40			
							QC 2 - 44			
							QC 2 - 45			
							QC 2 - 48			
							QC 2 - 49			
							QC 2 - 50			
							QC 2 - 51			
							QC 2 - 52			
							QC 2 - 57			
							QC 2 - 62			
							QC 2 - 63			
							QC 2 - 8			
							QC 2 - 66			
							QC 2 - 64			



Container No: S295356



Part: 650.7610

Job No: 211622

Serial No/Batch: S295356

Revision: REV. PA1

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 08/20/20

Plex 7/22/20 9:18 AM Dart.Renwick.Jennifer

				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
120	QC 8	3 pcs	7/24/20	0.00 0.00	QC 8 - 12
					QC 8 - 14
					QC 8 - 17
					QC 8 - 20
					QC 8 - 25
					QC 8 - 3
					QC 8 - 32
					QC 8 - 33
					QC 8 - 35
					QC 8 - 39
					QC 8 - 4
					QC 8 - 44
					QC 8 - 45
					QC 8 - 49
					QC 8 - 58
					QC 8 - 8
					QC 8 - 9
					QC 8 - 68
					QC 8 - 67
					QC 8 - 1 (A)
					QC 8 - 47
					QC 8 - 40
					QC 8 - 52
					QC 8 - 23
					QC 8 - 57
					QC 8 - 76
					QC 8 - 61
					QC 8 - 66
					QC 8 - 73
					QC 8 - 82
160	Packaging 3-1 - Stock - B4B	3 pcs	7/24/20	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
					Packaging 3 - 18 - B4B
					Packaging 3 - 19 - B4B
					Packaging 3 - 20 - B4B
					Packaging 3 - 21 - B4B

M 20/08/20

DAS
82
9-89

AUG 20 2020

				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 37 - B4B	
				170 QC 21 - SA	3 pcs
				QC 21 - SA - 70	
				QC 21 - SA - 9	
					AUG 21 2020

Part Op 100 - ***CRITICAL PART - EXTREME CARE MUST BE TAKEN*** 1-Machine as per folio FD L/A FOLIO REV:
 Descriptions: AA DWG REV: PA1 2-Deburr

110 - QC2- Inspect parts off machine FAI/FAIB

120 - QC8- Inspect parts - second check

160 - Identify as per dwg & Stock ****CRITICAL PART - EXTREME CARE MUST BE TAKEN**** MUST ENSURE THE COMPONENTS ARE NEVER DAMAGED****

170 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R0.625	303 Round Bar 0.625"	.5000 ft (.16667 ea)	100-HAAS 5 Axis	5250214

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-HAAS 5 Axis	M303R0.625	1	11	0

Part Specifications

Specifications could not be found.

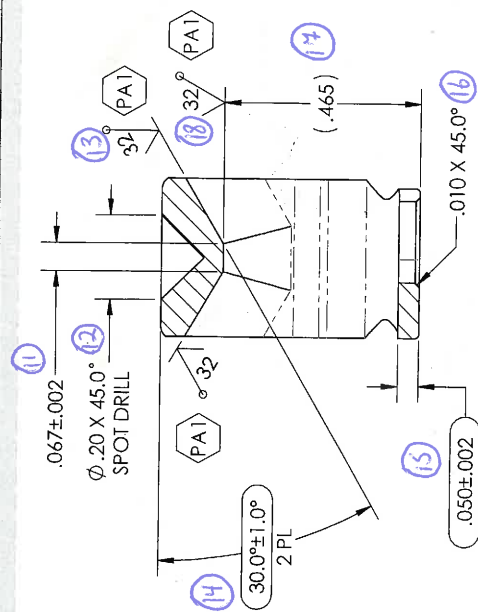
Plex 7/22/20 9:18 AM Dart.Renwick.Jennifer

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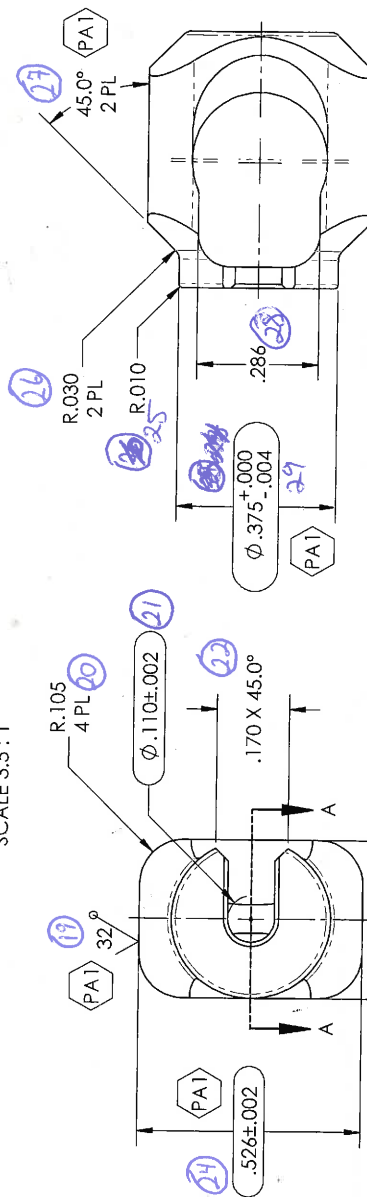
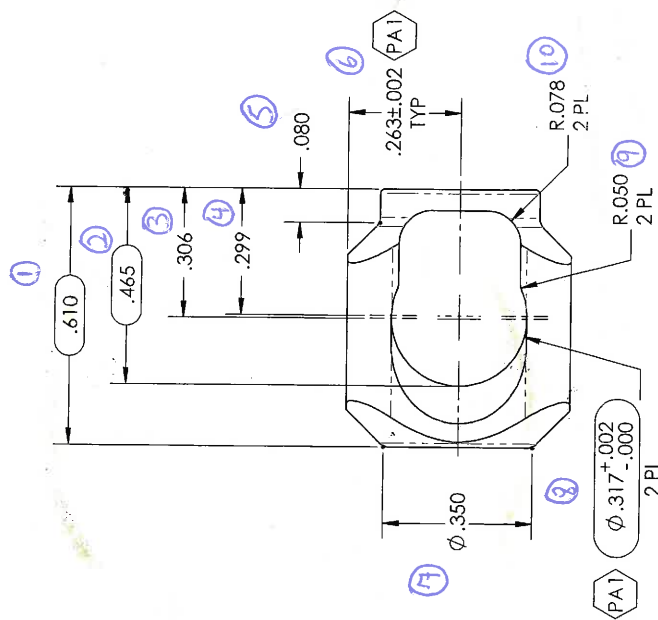
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
N/C	INITIAL RELEASE	04-25-2014	P. BRAVO
A	INCORPORATED ECH 04832	08-15-2017	P. BRAVO

NOTES:

1. MATERIAL: 303 SS IAW AMS-5640 **30**
2. DEBURR AND BREAK ALL SHARP EDGES
3. IDENTIFY IAW MPP-120
4. FINISH ¹²⁵/ MAXIMUM UNLESS OTHERWISE SPECIFIED



SECTION A-A
SCALE 3.5:1



PROTOTYPE REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A4-1		ADDED SURFACE ROUGHNESS VALUE		
A4-1		ADDED SURFACE ROUGHNESS VALUE		
C3-1		ADDED .243 ±.002 DIMENSION		
C4-1	PA 1	DIMENSION WAS 535±.002 IS 526±.002	06/01/2020	T. CROSS
C6-1		ADDED SURFACE ROUGHNESS VALUE		
C6-1		DIMENSION WAS 70.37±.001 IS 70.0007±.004		
D8-1		ADDED 45.0° 2 PL DIMENSION		
D-1		ADDED 2 PL TO DIMENSION		

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 211622

[illegible]

DART AEROSPACE LTD		Work Order: 211622
Description: TRIGGER		Part Number: 650.7610
Inspection Dwg: 650.7600 Rev: PA1		Page 1 of 1

INSPECTION SHEET

	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
①	0.610	± 0.005	0.609	✓		HJP-04	vern
②	0.465	± 0.005	0.466	✓			
③	0.306	± 0.005	0.306				
④	0.299	± 0.005	0.299				
⑤	0.080	± 0.005	0.085	✓			
⑥	0.263	± 0.002	0.2625	✓			
⑦	0.350	± 0.005	0.345	✓			
⑧	0.317	± 0.002 ± 0.000	0.3185	✓			
⑨	R 0.050	± 0.005	0.050	✓			
⑩	R 0.078	± 0.005	0.078	✓			
⑪	0.067	± 0.002	0.068	✓			
⑫	0.20 x 45°	± 0.010 ± 2°	0.202 x 45°	✓			
⑬	32°	± —	34°	✓			
⑭	30°	± 1.0°	30°	✓			
⑮	0.050	± 0.002	0.050	✓			
⑯	0.010 x 45°	± 0.005 ± 2°	0.008 x 45°	✓			
⑰	(0.465)	± 0.005	0.466	✓			
⑱	32°	± —	35.5°	✓			
⑲	32°	± —	35.5°	✓			
20	R 0.105	± 0.005	0.105	✓			
21	0.110	± 0.002	0.110	✓			
22	0.170 x 45°	± 0.005 ± 2°	0.170 x 45°	✓			
23	0.375	± 0.002	0.375	✓			
24	0.526	± 0.002	0.526	✓			
25	R 0.010	± 0.005	0.010	✓			
26	R 0.030	± 0.005	0.030	✓			
27	45°	± 2°	45°	✓			
28	0.286	± 0.005					
29	375	± 0.000 0.004					
30	303 SS		303 SS				
	AMS 5640		AMS 5640				MILL TEST ATTACHION H/T 462762

Measured by: DAS 33	Checked by: [Signature]	QC Inspector:
Date: 9-89 20/08/20	Date: 20/08/20	Date:

Engineering Approval: (If necessary)	Date:
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Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	

Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only

Job: _____ Part No. _____		DISPOSITION		DEPARTMENT/PROCESS			
Date : _____		Sequence #: _____		QTY Affected : _____			
Description Work Order Deviation		Disposition				Completed By	
						Lead hand / Supervisor	
						QC / QA Coordinator	
Root Cause		FAULT CATEGORY					
Operator		Pressure/Forced		Contamination		Power Loss/Surge	
Manufacturing Process		Bending		Misaligned/off center		Folio/Program	
Equip/Tooling		Crushing		BOM/Route		Grain Direction	
Handling/Preservation		Cracks		Broken/Damage/Defect		Weld	
Material		Crimp/Kink/Ripple/Wave/Twist		Incomplete/Unclear Instructions		Wrong Stock Pulled	
Product Improvement		Marks/Chatter		Drill Holes		Out of Sequence	
Process Improvement		Mislabeled		Fit/Function		Off-set/Set-up	
Human Factors							
		Other/Details:					

good for both 30°
angles surface

Mitutoyo Suritest SJ-400

DATE 2000-01-01
TIME 10:32:20

STAND JIS2001
PROFILE R
FILTER GAUSS
EVA-L 0.05in
N 5
 λ_c 0.01in
 λ_s 100 μ in
TILT-COMP. ALL
CURVE-CMP. OFF
M-SPEED 0.02in/s
R-SPEED 0.04in/s
AUTO-RTN ON
RANGE 32000 μ in
 $\pm$ ESC
DRIVE ON
STYLUS STAND
PRE/POST ON

R-PROFILE

EVA-L 0.05in
 λ_c 0.01inX5

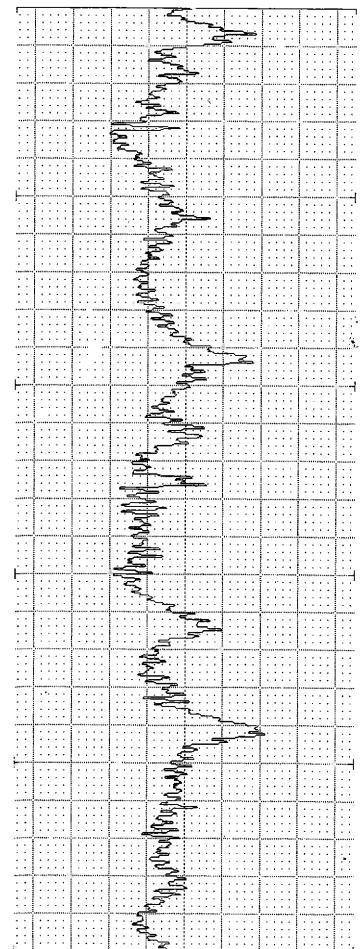
Ra 14.6 μ in
Rz 60 μ in
Rq 17.2 μ in

R-PROFILE

EVA-L 0.05in
 $\lambda_c=0.01$ inX5

→x 10K
x 100

Ver. 100.000 μ in/in
Hor. 0.010in /in



Shipping Order

22/01/2020

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7
Tel.: 450 641-3330

Order : 149625
Reference : pohb045541
Ship : PICK UP / PICK UP

Customer : 6323336

Ship To

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
MR3441H	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N 4140 HTSR ROU .750 DIA 1 x 22' ht:75070620	22	22	0
MR11841H	4140 HTSR ROU 1.125 DIA 1 x 20' r/l ***** ht:75072955	23.42	23.42	0
DT12083	MS TUB .500" X .083" WALL DOM 4 x 20' r/l ***** ht: mm18106467	81	81	0
SR583	303 ROU .625 DIA 2 x 12' r/l ht:462762	25	25	0
SR13	303 ROU 1.000 DIA 3 x 12' r/l ***** ht:432071	36	36	0
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 40 x 3" x 14" ht:1961550	11.68	11.68	0
TP12A2	A-2 PLATE TFA 1/2" THICK 4 x 1.25" -0+ .0656" x 144" r/l ht:9919020379b-48-1	102	102	0
	livre jp			

DAS
82
9-89

JAN 23 2020

Shipping : _____

Ref. : _____

Package No : _____

Merchandise Received: _____

Larrendo LOIU (VIZCAYA) España
P.O. Box 1.323/48080 Bilbao
Tel. 34-(4) 4 71 13 00
Fax. 34-(4) 4 53 16 36

Management Systems
Certified by
LRQA
ISO 9001 / SGT 6000350
ISO 14001 / SGT 1870576

ACEROS INOXIDABLES

OLARRA

Trade Mark - Zeichen des Lieferwerkes
Anagrama del suministrador

Works Inspector Stamp - Werkssachverständiger
Sello del Inspector



3

Certificate type - APZ Nach Certificado tipo		EN 10204/3.1		Certificate n° - Prüf-Nr Certificado n°		362910		Date - Datum - Fecha 13 - 09 - 2018	
Our order N° Works - Nr N° de Referencia		665995		Heat Schmelze Coleda		462762		Your order N° Bestell - Nr Pedido N°	
								C113864	
Steel Grade Werkstoff Calidad		AISI-303		According to Entsprechend Corresponde		ASTM A 562 / A 582M-12.		DAS 82 9-89	
Shape and Size - Gegenstand Perfil y dimensión ROUND 5/8"		Tolerance - Toleranz Tolerancia ASTM A 484 / TB.7		Bundles Bunde Bultos		1		Bars Stäbe Barras	
								Weight Gewicht Peso	
								1673 Lbs	
Requirements - Anforderungen - Exigencias									
QQ-S 764B-70-AMD2 COND.A. SAE AMS 5640U-07. TYPE I. EN 10.088-3.2014. 1.4305. MECAMAX - PLUS									
Melting process / Erzmelzungsart / Proceso de Fusión				Heat treatment / Wärmebehandlung / Tratamiento térmico					
E.A.F. / A.O.D.				1050C 4H/Std WATER/WASSER/AGUA					
Solution annealed/Abgeschreckt/Nipertempe-Cold drawn/Gezogen/Estirado-Polished/Poliert/Pulido-									
Test results - Ergebnis der Prüfungen - Resultados de los ensayos									
Dimension of Specimen Abmessungen des Probestabes Medida de las probetas		Rp0.2% KSI	Rp 1% KSI	Rm KSI	A %L 5D	A %L 4D	Z %	Hardness Härte HBw	Impact test / Kernschlag / Resiliencia ISO V ft. lb
RD. 12,50 mm.									
Temperature °C 20		Spec. N° Probe Nr. Pro N°	1	84	94	105	33	55	217
	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
Min.					0,150	17,00		8,00	
Max.	0,150	1,00	2,00	0,200		19,00		10,00	0,70
	0,046	0,48	1,83	0,036	0,334	17,73	0,40	8,41	0,48
Visual and dimensional inspection Besichtigung und Ausmessung Control visual y dimensional		Radioactivity inspection Radioaktivitätskontrolle Control de Radioactividad		Antineutrino test Spektroskopische Verwechslungspr Antineutrino		Grain Size Korngröße Tamaño de grano			
O.K.		O.K.		O.K.					
Remarks - Bemerkungen - Observaciones									
Free From Mercury contamination/Quecksilberfreiheit. No weld repair.									
EDV / EDP Acc. EN 10.204 Marian Tejedo Quality Mng.									
Works Inspector Der Werkssachverständige Inspector de fábrica									

We hereby certify that material described herein complies with the requirements agreed on the order.

Firmado digitalmente por / Signed digitally by:
ACEROS INOXIDABLES OLARRA SA - CIF A48663546
Fecha / Date: 13-09-2018 16:32

221586

LINE 4
M303R0.625

MT 462-762
S250814

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)
SPECIFICATION: ASTM A592
PART NUMBER: M303R0.625
DIA.
WHERE "D DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

DAS
82
9-89

RELEASED
2000-02-02
AND

B		REFORMAT DWG. ADD SPECS (2N DB-1)		CP	10.01.05
A		NEW ISSUE		DS	01.12.20
REV		DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD			
DRAWN		HAWKESBURY, ONTARIO, CANADA			
CHECKED		DRAWING NO.	REV. B		
MFG. APPR.		M303R	SHEET 1 OF 1		
APPROVED		TITLE	SCALE		
DE APPR.		303 ROUND BAR	NTS		
DATE	10.01.05	DART AEROSPACE LTD			
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.					

LIVE 4

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 12 0.625
 DATE: JAN 24 2020

PO / BATCH NO.: POH1304554/
5250214

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 25 PF
 QUANTITY INSPECTED: 25 PF
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625
 THICKNESS RECEIVED: 0.625
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	☒ Y ☒ N	605 2020/01/24
CORRECT FINISH	☒ Y ☒ N	
CORROSION	☒ Y ☒ N	
CORRECT GRAIN DIRECTION	☒ Y ☒ N	
CORRECT MATERIAL PER M-DRAWING	☒ Y ☒ N	ASTM A582
CORRECT THICKNESS	☒ Y ☒ N	
PHOTO REQUIRED	☒ Y ☒ N	
CORRECT REF # TO LINK CERT	☒ Y ☒ N	462762
CORRECT MATERIAL IDENTIFICATION	☒ Y ☒ N	
CORRECT M# ON THE MATERIAL	☒ Y ☒ N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	☒ Y ☒ N	
DOES THIS REQUIRE AN EXTRUSION REPORT	☒ Y ☒ N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS 82	SIGNED OFF BY: _____	
DATE: <u>JAN 24 2020</u>	9-89	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in